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[Despatch Abstract.]

Forest- South Kanara

Dr— Development - Proposal

Budget provision

Forests.

STATION Chepauk.

Date 10th August 1922.

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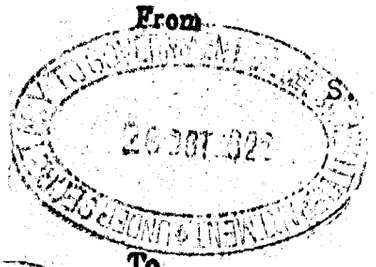
From

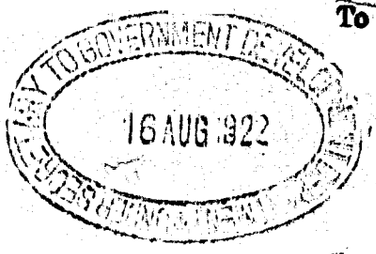


S. Cox, Esq., C.I.E., I.F.S.,

Chief Conservator of Forests.

M a d r a s.

To



The Secretary to Government,

Development Department.

SIR,

I have the honour to forward herewith a report by Mr. Tireman, Conservator of Forests, VI Circle, on the future development of the forests of the South Kanara District.

2. Mr. Tireman deals first with the possibilities of development and in view of the great area and value of the forests involved and of the absence of any previous experience of forest working in this country on a large scale suggests that the whole project is one which cannot be put into operation until it has been examined in detail by the special Engineering Branch.

He next deals with the immediate need for cultural operations which have been neglected in the past with the result that, instead of there being on the ground a valuable crop of young forest, the stand, especially when the forest has been exposed in previous years to shifting cultivation, consists of badly grown crooked trees of little marketable value.

Lastly Mr. Tireman deals with the desirability of increasing the present outturn of timber in order to cover the cost of the cultural operations proposed.

3. I do not think it is necessary to deal with these proposals at length. The report itself is comprehensive and there is little I can add to it.

One curious feature I would like to point out with regard to future development. South Kanara, although probably the most heavily forested district in the Presidency and particularly well supplied with road and water communications, is from the point of view of the timber-trade oneof the most back-ward in South India, and derives much of its supplies from the neighbouring district of Malabar. The reason for this anamoly is that there are very few private forests in the district and as Government have never attempted to develop their own forests, there has never been much opening for timber traders.

In these circumstances it is hardly necessary to stress the amount of investigation needed before the local timber trade and industries can be stimulated, or before outside markets can be found for the large surplus supplies of timber which the forests will yield.

The factors on which development must be based are the quantity and value of the existing stand of forest and the cost of placing timber on the market. Enumeration, valuation, examination of lines of export and an investigation into the most economical methods of exploitation and utilization must be taken in hand vefore a scheme can be prepared.

4. On the question of the need for cultural operations Mr. Tireman has written at length. It is satisfactory to know from the results of research work undertaken on a considerable scale during the last two years that no doubt exists of the possibility of re-stocking the forests at an expenditure which is far below that of artificial regeneration in other parts of the Presidency.

The question for consideration by Government is whether the Forest Department having almost entirely neglected the improvement of the forests for the past 40 years should begin at once to undertake this work on a large scale, or whether it should be postponed until the cost can be met from the profits to be derived from development

From a forest point of view there is every reason to push the work of regeneration forward as fast as possible. It is obviously necessary and there is nothing to be gained by its postponement.

From a financial point of view it may be more convenient to postpone the work until the advent of more favourable financial conditions.

Mr. Tireman in consideration of the possible financial difficulties, proposes that regeneration should be undertaken on a considerable scale at once although not to the extent which will ultimately be necessary.

5. The additional recurring cost of this scheme is estimated at Rs.52,500/- as detailed in para 26 of Mr. Tireman's report, and to cover this additional expenditure provision is made for increased exploitation of timber from the sale of which it is estimated that a profit of Rs.60,000 will be obtained.

Whether these figures will bear close examination or not, I am uncertain. I will go more closely into the question when submitting my report on major operations for the year 1923-24 which will reach Government before the end of August.

But for present purposes it may be taken for granted that if Mr. Tireman's proposals are approved, there will either be a small profit or at the worst a small loss shown in the District Budget until such time as the forest are sufficiently developed to pay their way. If, as would be the case under a proper system of accounting, the expenditure incurred on regeneration were made a capital charge against the future crop no question of loss would arise.

6. I request that orders on this report may be held over until my further report referred to above is received. The latter will go more closely into financial detail.

I have the honour to be,

Sir,

Your most obedient servant,

15.8.24

For Chief Conservator.

MS/

Copy of letter from H.Tireman Esq., Conservator of Forests, VI Circle, Ref.No.M.344/21 dated 8th July 1922.

Subject:- Forests-Development of - South Kanara -- Proposals.

I submit the following report on the forest development which, I propose, should be undertaken in South Kanara. I have divided it into two parts, the first dealing with the possibilities of exploitation of timber on a large scale and the second with the question of regeneration.

PART I. EXPLOITATION

1. Last cold weather I made a fairly extensive tour in the district where I spent about two months. The main object of my tour was to elaborate the somewhat tentative proposals for the future treatment of the forests which I put forward in my C.No.517 dated 17th Febry 1920, and especially to see the forests in the northern division which I had not previously had an opportunity of visiting.

Previous proposals: owing to large extent of forests ruined by Kumri exploitation to be a secondary consideration.

2. In my report referred to I stated that a big scheme of exploitation was out of the question owing to the fact that the greater part of the forests had been subjected to kumri cultivation in the not very distant past; I said that I had not seen the forests of the northern division but that I gathered that they were in much the same degraded condition as those in the southern division. For these reasons I proposed that the main feature of future working should be the reconstitution of the forest crop, by sowing of valuable species suited to the locality, and that although the removal of the existing inferior crop incidental to the raising of the new one would more than pay for the latter undertaking, exploitation should be more or less a secondary consideration.

3. My reason for stating that the forests of the Northern Division were in much the same condition as those in the south was

was based on what I could learn from the then District Forest Officer and some of his predecessors, though I was not altogether satisfied on this point as Mr. Couchman who knows the district well had told me that he was sure there was plenty of fine timber.

4. In view of what the District Forest Officers had told me about the Northern Division I was not a little surprised to find in the course of my tour that far from there being no large area of exploitable timber the Ghat forests are some of the finest I have ever seen, and I have little hesitation in saying, when its proximity to the sea is considered, that this division is one of the most - if not the most - valuable forest divisions in the Presidency. I went up the Someshwar (Agumbe), Hosangadi and Kollur Ghat roads and inspected some of the forests in the neighbourhood of the first and last named places. I have never seen finer evergreen forests anywhere. There is a very large stand of timber, and the trees reach enormous proportions; many of them, I regret to say, are unknown to me but I saw numbers of Dipterocarpus, Cedrela Toona, Acrocarpus fraxinifolius, Myristica, Poecilioneuron, Hydnocarpus, Mango, Poon, Eugenia, Gardneri, and some Mesua, while the lower slopes are stocked with fine trees of Lagerstroemia, Terminalia tomentosa and paniculata, Xylia, and Terram nudiflora, and the more level ground at the foot of the ghats contains large quantities of fine Hopea, Artocarpus hirsuta, and Vateria India. I had no time to go far from the roads, but except for the previous existence of kumri the more inaccessible forest tracts are scarcely likely to contain a poorer stock. As far as I could learn from local enquiries except in the neighbourhood of Kollur, there has been no recent kumri on the ghats; it has been confined to the unreserves a few miles from their foot. There is, however, a considerable area of older kumris which on the ghat slopes do not contain much timber; I have posted an Extra Assistant Conservator to determine their approximate area, which can easily be done with

Large areas of virgin evergreen forest in Northern Division.

with the help of the 4" maps. The area of forest on the ghats and at their foot from the Megani valley in the north to the Kudre Mukh in the South is about 1,90,000 acres. The kumried areas are not likely to exceed 50,000 acres and pending the result of the examination now being conducted, we may assume that we have 1,40,000 acres of forest most of which contains upwards of 40 tons of timber per acre.

5. Conditions for exploitation are ideal. At no point except in the extreme south of the northern division are the forests more than 25 miles in a straight line from the sea while there are several very good and easy roads from which it will be a simple matter to make feeder roads. The crest of the ghats is for the most part comparatively low and most of the forest is situated on fairly easy ground; dragging the timber to the roads will thus present little difficulty. There are moreover several rivers of fair size; except on the tidal portions of these, no floating seems to have been done in the past, but from what I have seen of them I do not think that there would be much difficulty in floating for some distance above the tidal reaches. If I am correct in this surmise it is not likely that the distance over which timber from the northern twothirds of the forests of the northern division will have to be carted to points from which it can be floated will exceed 15 miles; from the southern third of the area the average distance may be about 30 miles.

Conditions ideal for exploitation.

6. In the southern division I visited some of the forests in the upper basin of the Mumaradhari river and found that they contain a stock of timber greatly superior to that in the forests along the Coorg and Siradi roads which I had seen in the course of my previous visits. The Nalkur reserve contains a very fine stand of Hopea, Poon, and other evergreen timbers besides a number of large trees of the commoner deciduous species. I should roughly estimate the stock

Southern forests better than previously reported

at 40 tons per acre. The southern portion of the Mujur reserve is not much inferior to this, and I am told that higher up the valley the stock is as good as, if not better than, in Nalkur. These forests are however at a considerable distance from the coast or from a river fit for floating.

7. In view of the immense resources of timber and the easy conditions for exploitation in the northern division and also of the fact that further inspection has revealed the existence of considerable areas of forest of fair quality in the southern division the view that exploitation in South Kanara is more or less a secondary consideration requires modification. On the most conservative estimate we have an exceedingly valuable property which can be made to yield a large profit at a comparatively early date.

Existence of a very valuable forest property.

8. In order to give some idea of the possibilities before us, I have framed the following rough estimate. the forests may be roughly divided into three tracts as follows:--

Rough estimate of the possibilities.

(1) The forests of the northern division 1,40,000 acres in extent. Although I consider that the major part of these forests contains from 40 to 50 tons per acre, to be on the safe side I have put the "stand" at 25 tons. Assuming a rotation of 100 years (though I am confident that the time required for evergreen trees in this climate to become mature will prove to be consirably less) 1,400 acres could be clear felled every year and would yield 35,000 tons.

(2) The more accessible forests in the Southern division. These cover roughly 120,000 acres. Although in my previous report I put the stock at 12 tons per acre, I think after further inspection that it would be safer to put it at 7 tons. The forests however are comparatively young, and although the stand may not be more than 7 tons per acre today, in another 50 years or so it will be at least 25 tons and will go on increasing. Neglecting any

any increase above 25 tons per acre, it will be perfectly safe from the point of view of forest finance to assume that if the felling are spread over 100 years the average annual yield will be, say, 19,000 tons(i.e. 1,200 acres multiplied by the average of 7 and 25), and in consequence, instead of limiting the area to be felled every year to 1,200 acres we can fell as much as will yield 19,000 tons or slightly over 2600 acres.

(3) The more inaccessible forests of the southern division, covering about 110,000 acres. Considerable portions of these carry a stock of 40 tons per acre, but there are also some poorer tracts and to be on the safe side I estimate the stock all round at 12 tons per acre. Here again the "stand" will go on increasing till it is at least 25 tons per acre in 50 years, and adopting a similar calculation to that in the preceding sub-para, it will be safe to fell, say 20,000 tons every year, the area to be felled being about 1600 acres. The total annual yield may therefore be estimated at 74,000 tons.

9. Adopting figures given to me by Mr.Martin for costs of exploitation and assuming that skidders will not be required but the tractors can draft the timber from the stump to the road transport, I calculate that establishment, felling and dragging will cost 5 annas per cubic foot, while road transport and floating will cost about 4 annas per cubic foot. In the northern division, Coondapoor will be the coastal depot for the timber from about 70,000 acres, Bālakudru (Hangarkatta) for that from 56,000 acres and Mangalore for that from 24,000 acres. From Coondapoor and Balakudru the timber must go by sea to Mangalore - assuming for the moment that that place will be its eventual destination. I am told that the sea freight by native craft from Coondapoor to Mangalore is 5 annas per cubic foot, but this represents a charge of more than 2½ annas per ton per mile, which is a good deal higher than railway freight, and it is almost certain that by chartering vessels the freight could be very

Estimate of cost of exploitation.

considerably reduced. I am told that from Kasaragod to Mangalore (about half the distance from Coondapuor) the freight is only 1½ anna, and I think we may safely assume that it will be possible to carry the timber to Mangalore for an average of 3 annas per cubic foot from Coondapoor and Balakudru. The total cost of extraction and transport to Mangalore from the greater of the northern forests would thus be about 12 annas per cubic foot. From the 24,000 acres from which the timber will go direct to Mangalore the cost of transport will be about the same as, though road haulage will cost more, ... freight will be eliminated. From the forests in the southern division the average cost delivered in Mangalore will also be about 12 annas per cubic foot.

10. In the evergreen forests which carry the largest "stand"- the majority of the trees are more or less unknown soft -woods. I have recently made enquiries into the cost of boxes made of such soft - woods and I find that boxes for packing rubber which contain about ¾ c.ft. are now being soldon the coast for about Rs.2 each. Making an ample allowance for wastage in sawing, one cubic foot should be sufficient to make a box while seasoning and cutting the timber into shooks should not cost more than eight annas per box. Two rupees per box thus represents a price for timber in the log of Re.1-8-0 per c.ft. and I think that it is safe to assume that softwoods delivered at a sawmill would fetch not less than one rupee per c.ft. Many of the timbers of the first and third tracts referred to in para 8 will fetch prices ranging from Re.1-8-0 to Rs.2 or possibly more, and putting the proportions of these timbers to the total stand at 25 % - a conservative estimate- we may expect for the timber from the northern forests and the more inaccessible forests of the South an average price of Re.1-2-0 per c.ft. The timber in the more accessible forests of the southern division is almost all well known hardwoods such as Terminalia tomentosa and paniculata, Xylia, and the like with a certain quantity of teak and rosewood, and it is safe to assume an average selling price of Rs.1-4-0 for these timbers. The profit on the timber from the northern and the more inaccessible

Price obtainable for the timber.

forests of the south should thus be 6 annas per cubic foot or Rs. 18-12-0 per ton while that on the timber from the remaining forests should be 8 annas per cubic foot or Rs.25/ per ton.

11. The total profit should thus be:-

Possible net result.

55,000 tons at Rs.18-12-0 per ton .. .. Rs. 10,31,250.
19,000 " 25/ " 4,75,000
or a total of say Rs.15 lakhs per annum.

Part II of this report deals with the cultural operations required for the improvement of growing stock; they will cost inclusive of the additional establishment required for their execution about Rs.1/ lakh. The net annual profit on the working should thus be about Rs.14/ lakhs.

In order to avoid an over-sanguine estimate I have not taken into account the possibility of selling certain timbers in Europe at considerably higher prices; I have recently been informed by Mr. Howard of Messrs. Howard Bros., the agents in Europe for the sale of Indian Government timber that selected Mesua, Poon, Cedrela Toona, Lagerstroemia, and Terminalia tomentosa will almost certainly fetch what represents a price on the coast three times that for which these timbers are selling at present or say from Rs.4 to Rs.8 per cubic foot.

12. Before it is decided whether a scheme of this magnitude should be embarked on, a careful examination of the whole project by an expert in lumbering is absolutely essential. Without such examination-which should include enumeration of a proportion of the forests in order to obtain some idea of the actual "stand" - it is impossible to decide such matters as whether exploitation should be concentrated in one locality and if not in how many localities work should be undertaken, whether one or more sawmills should be erected and where they should be located, what is the best method of transport to adopt and what incidental plant is advisable for

Necessity for examination by Lumber Expert.

dealing with the product of the saw-mills. The purpose of this report is to show that there is a very fair probability of our being able to work the Kanara forests at a large profit, and to justify the examination of the project by a lumber expert.

13. Pending the complete examination of the project Mr. Martin has advised that for the most accessible forests in the north from which timber can be extracted to Coondapoor without much difficulty a definite small scheme should be worked out not involving more special equipment than is absolutely necessary to make a start. He proposed that Mr. Irwin should be deputed to do this, but he cannot be spared and there is no other officer available, It will therefore be necessary to await the creation of the proposed Engineering Branch of the Forest Department.

Small scheme to be worked out immediately

PART II. REGENERATION

14. In my previous report referred to in para 1, I proposed that steps should be taken to stock as large an area as possible with crops of Hopea parviflora, Artocarpus hirsuta, Vateria Indica, and Mango. Since I wrote that report we have considerably advanced in our knowledge of the sylvicultural requirements of both Hopea and Artocarpus; naturally and artificially grown seedlings of both have responded in marked degree to removal of the shade which previously interfered with them, and we have experienced extraordinary success in sowing Hopea on a comparatively large scale during the last two years. I have seen some 2,000 acres of such sowings, and found scarcely any failures. I also found that in the northern division the tree is flowering profusely this year, and was told that a more or less profuse flowering occurs practically every year; it was previously thought that a seed year occurred at intervals of three or more years. All over the northern division there are thriving private plantations of the species which appears literally to "grow like a weed" in this district. Neither cattle nor deer browse on the seedlings and the people do not use the leaves as manure. Everything therefore points

Hopea the species par excellence to be cultivated.

points to Hopea as the species par excellence to be cultivate those forests in which it does not commonly occur.

15. The forests of South Kanara which possess such great potential value have in the past been almost entirely ne

Neglect of forest improvement in the past.

ed. During the 25 years ending 30th June 1919 t total expenditure on works of improvement (roads bridges, buildings, sowing and plating, protection from fire and miscellaneous) amounted to Rs.1,76,021, an annual average expenditure per acre of <u>just over 2½ pies</u>. When one cons ders how easy it is to raise crops of Hopea, and the vast areas of poor forest on which this tree can be grown, this neglect is little short of a scandal. To make amends for the past, I propose that sowing on a large scale shall be undertaken. Excluding the fuel, forests near the coast and the steep and inaccessible upper slopes of the ghats, the forest area may be put at 400,000 acres. Here and there one finds patches of naturally grown Hopea but the area of these is negligible in comparison with the total area of the forests. In the fine evergreen forests of the Northern division the regeneration is fairly good, but the value of the young crop will be greatly increased if Hopea is raised along with it. I therefore propose to deal with the whole area of 4,00,000 acres. The reason why the area proposed to be sown differs from the area to be exploited as detailed in para 8 is that the former includes certain forests which though suitable for sowing carry no crop at present.

16. In the absence of any definite knowledge on the subject I propose to base the area to be sown every year on a rota

6000 acres to be sown annually.

tion of 70 years and to sow 6,000 acres per annum. From the little that I do know about the species. I think that the rotation will not be much longer than 70 years, but in any case there can be no harm in commencing operations on a basis of 6,000 acres because the work for the first few years will be considerably less than it will be when there are gradually increasing areas of young crops requiring tending, and for this reason alone it will probably be necessary after some time to decrease the annual area. 6,000 acres may appear to be a large

ea to deal with every year, but the work is so comparatively easy at I am confident - given the necessary establishment - of being e to deal with it. As things are, without any increase of -- tablishment some 2,300 acres have been successfully sown in the ast two years. In para 8, I have shown that the average area to be felled annually will be 1,400 acres in the first of the tracts into which I have divided the forests, 2,600 acres in the second, and 1,600 in the third, or 5,600 acres in all. The area I propose to sow every year thus approximates fairly closely to the area to be felled.

17. Raising a new crop will be a natural and necessary concomitant of the exploitation which I am confident will be undertaken after the project has been duly examined. I propose however that regeneration should be commenced at once in order to make amends for past neglect, and because the work is easy and can - as has been proved- be successfully undertaken. There is no necessity from a sylvicultural point of view to wait until fellings have been carried out, -- except possibly in the case of the virgin evergreen forests, for in the deciduous forests a crop of Hopea can be raised and established without doing more than removing the undergrowth and low shade, after which it can be left to itself to await the fellings when it will take the place of the trees removed. The existing crop is not very dense and if due care is exercised in the fellings little damage should be done to the young Hopea. In the evergreen forests however the trees of the mature crop are of such great size that it will be difficult to avoid damaging the young crop when they are felled, and for this reason and also because there is already a fairly valuable young crop on the ground I would defer sowing Hopea until after the fellings have taken place.

Advisability of commencing regeration work at once.

18. I propose to undertake the sowing work in ~~the~~ six localities, 1,000 acres being dealt with every year in each. These localities for the present will be as follows:--

Location of areas to be sown.

Northern division.

1) The slopes of the ghats behind Baindur.

Southern division.

(1) The forests along the Beltangadi-Charmadi road.
(2) The forests along the Uppinangadi-Siradi road.
(3) The forests in the neighbourhood of Parappa.

19. In order to cope with the work and to ensure its being properly carried out, a large increase of establishment will be required. As I have already stated, though possibly the most valuable forest tract in the Presidency, South Kanara has hitherto been starved. The forest area is 798 square miles almost all of which is potentially or actually of great value, and owing to the climate and the innumerable unbridged rivers the country is a difficult one in which to move about, yet until quite recently the district possessed only one District Forest Officer. The number of rangers is seven, and although there are now two District Forest Officers, this establishment in such a difficult country is utterly inadequate for any development. If the cultural operations which I propose are to be properly carried out, constant and thorough inspection by superior officers will be essential; the sowing and much of the subsequent tending will be done in the months of May, June, September and October when owing to the numerous unbridged rivers and the absence of metalled roads, travelling in the interior of the District is a matter of the greatest difficulty. Two District Forest Officers cannot exercise the supervision which is necessary if the money expended is not to be wasted. It has to be borne in mind that supervision will not be confined to the area sown each year; the subsequent tending in the following year is quite as important a matter as the sowing. This work consists in keeping the young seedlings free from weeds, climbers and overhead shade; properly carried out it will ensure the establishment of the young crop, in other words the young seedlings will shoot up and after two years can probably be left to themselves with safety, but if the work is neglected (and my experience of this class of work is that it is neglected unless constantly supervised) the seedlings become suppressed, many of them die and in consequence the money spent on raising them is wasted. Constant supervision over an area of 12,000 acres will be required, and I am convinc

Necessity for an additional division and large increase in establishment.

convinced that for this in addition to the ordinary administration not less than three District Forest Officers are required. Each officer would have to supervise sowing and tending over an area of 4,000 acres. The usual area of a coffee estate supervised by one Superintendent is 250 acres, and though of course such close supervision as is necessary on a coffee estate will not be called for in this case it must be remembered that the supervision required is a very different matter from the ordinary inspection work which a District Forest Officer has to carry out. In this case he must constantly inspect practically every seedling. I am of opinion therefore that in order to make the proposed cultural operations a success it is essential that the District should be divided into three forest divisions.

20. The average area of a division would be 266 sq.miles, which at first sight may seem small when compared with the average of the Presidency, but it must be borne in mind that practically every acre of the forests in Kanara is valuable and no real comparison can be made with districts such as Guntur and Bellary. In Coorg with only 520 sq. miles there are two divisions and in addition to the Divisional Officers there are two sanctioned appointments of gazetted officers; in the United Provinces the average area of a division (excluding the small afforestation division) is only 318 sq. miles, and there are 5 divisions of less than 200 sq. miles; and in France the average area of a division is, I think, about 25 sq. miles.

Justification for small divisions.

21. I propose to distribute the three divisions as follows, vide the small scale map accompanying this report.

North Tuluva or Coondapoor division. Area 201 sq. miles. The Coondapoor Taluk as far south as the southern boundary of the Balimane R.F.

Central Tuluva or Mangalore division. Area 280 sq. miles. From the Coondapoor division south as far as the Shishla river and the southern boundary of Mangalore Taluk.

South Tuluvu or Puttur Division. Area 317 sq. miles. The rest of the district

The North Tuluva division would be smaller than the others

but in addition to the sowing and tending it would comprise the very heavy fuel supply from the forests of the Coondapur taluk. a a considerable amount of protection work.

22. As regards Rangers, the sanctioned cadre is now seve One of the rangers (Uppinangadi) contains 240 sq. miles of forest and is far beyond the capacity of one ranger, and in any case even if no development were proposed it would be necessary to split this range up at once. Proposals to this end were submitted some two years ago by the District Forest Officer and it was only because I thought it best to wait until I was ready to frame the present proposals, that I did not then ask for another Ranger. I am now submitting separate proposals for -- sanction. In addition, each area to be sown will call for one ranger: it will be quite impossible to deal with such a large area as 1,000 acres without a ranger who can devote his whole time to th work for in addition to the actual sowing it will be necessary to prepare the soil in advance, a work which will take some months to carry out, and to tend and weed the young seedlings resulting from the sowing. A range peon will be required for each ranger and a range clerk for the new range to be formed out of the Uppinangadi range. In addition to a ranger, two foresters and eight guards will be required for each locality. In all, therefore 7 rangers 12 foresters, 48 forest guards, 1 range clerk and 7 range peons will be required. The forest guards will be required to recruit and supervise the labour engaged; there will be a considerable number of coolies working in each locality and eight guards is - I consider - the minimum force required. The two foresters will be required to supervise the work of the guards' labour gangs.

Establishment of rangers and subordinates.

23. Owing to the very important nature of the cultural work to be undertaken I consider that two of the three proposed divisions should be held by Imperial Officers. The total annual cost of the additional establishment proposed would thus be approximately as follows. In this calculation I have omitted the cost of the additional ranger required for the new range referred to above and of his clerk and peon as this addition to the establishment will be required in any case apart

Rough estimate of the annual cost of establishments.

art from the proposed new works. The amount so omitted is about 3,700/- per annum.

One Imperial Service Officer - average pay Rs.1050 per mensem.					Rs.12,600.
Six Rangers - average pay Rs.150 per mensem.					" 10,800.
Twelve Foresters	"	"	40	" "	" 5,760.
Forty-eight forest guards			20	" "	" 11,520.
Six range peons.	"	"	14½	" "	" 1,044.
Travelling allowance of Imperial Service Officer at an average of Rs.150 per mensem.					" 1,800
"	6 Rangers	"	75	" "	" 5,400.
"	12 Foresters	"	8	" "	" 1,152.
"	6 Range peons		7½	" "	540
Cost of office establishment of a District Forest Officer at Rs.500 per mensem.,					" 6,000.
				Total.	Rs.56,616.

24. The cost of carrying out the sowing operations and the tending required during the first two years after which the crop can be left to itself will be about Rs.6 per acre or Rs.36,000 in all. It will be necessary to build temporary quarters in each locality where sowing is taking place to house the establishment and the labour employed on the work. These will cost about Rs.3,000 in each locality or Rs.18,000 in all and as they will last for three years the annual expenditure on this item will be about Rs.6,000. A further annual charge will be the interest and depreciation on the office building which will be required if my proposals to split up the existing two divisions into three are approved. No District Forest Office has been built very recently but the South Coimbatore Office built when labour and materials were cheap cost Rs.12,800; I do not suppose that the new office will cost more than Rs.20,000. Interest and depreciation at say 10 per cent on this sum will amount to Rs.2,000 per annum. The total annual cost of my proposals will thus be:--

Establishment.	..	Rs.56,616.
Sowing and tending.	..	" 36,000.
Temporary building.	..	6,000.
Interest and depreciation on office buildings.		2,000
Total.		Rs.1,00,616
Say		or Rs.1,01,000.

curred on the comparatively small sowing operations now in pr
This is approximately Rs.9,000. The net additional annual e
ture will thus be Rs.92,000.

In this calculation I have not taken any account of
quarters which it will be necessary to build for the additio
District Forest Officer, as the house rent which he will pay
cover the interest on the capital cost.

25. My original intention was that this expenditu
should not result in a deficit in the forest budget of the
but that it should be covered by expanding the timber works no
progress and by extracting sufficient additional timber for th
purpose; but on going into the question in detail I find that
owing to transport difficulties and a restricted market, it wi
not be feasible to do more than extract enough timber to cover
Rs.60,000 of the additional expenditure. The proposed cultu
operations therefore would result in a deficit of about Rs.32
per annum until such time as exploitation on the lines suggeste
in Part I of this report were commenced.

26. Having regard to the present financial situation
is probably not justifiable to embark on a larger scheme of impr
ment than the forests can pay for. Until therefore exploitatio
on a large scale is begun I propose to undertake only as much
ral work as can be paid for by such expansion in timber extrac
as is at present feasible, and to sow three thousand acres per
in place of the six thousand acres proposed in para 16. This
entail the employment of three in place of the six additional
rangers proposed, six instead of 12 foresters, and 24 instea
48 guards with a corresponding reduction in the cost of bui
required for the staff and labour. If this proposal is ad
the annual cost will be as follows:--

One Imperial Service Officer, agerage pay at Rs.1950 per mensem.				Rs.
Three Rangers, average pay at Rs.150 per mense				
Six Foresters.	"	"	40	"
24 forest guards.	"	"	20	"
Three range peons.	"	"	14½	"

Travelling allowance of Imperial Service Officers at an average of Rs.150 per mensem.	1,800	
" of 3 rangers at Rs.75 per mensem.	2,700	
" of 6 foresters at Rs.8. "	576	
" of 3 range peons at Rs.7½ "	270	
Office establishment of District Forest Officer at Rs.500 per mensem.	6,000	
Total.	38,508	
	or	
Rs.	38,500.	
Fencing and tending 3,000 acres at Rs.6 per acre.	18,000	
Temporary buildings (half the amount provided in para 24).	3,000	
Interest and depreciation at 10 per cent on the District Forest Office building.	2,000	
		23,000
Total.		61,500
Deduct expenditure now being incurred on sowing.		9,000
Balance		Rs.52,500

I have purposely retained the provision for an additional District Forest Officer, for even with the reduced area to be sown, this officer will be necessary if the work is to be efficiently carried out. I have given full reasons for this in para 19 and need not repeat them here. I would merely add that an additional reason for employing a third District Forest Officer is the greatly increased work which will be necessary in connection with an expansion in the extraction of timber, a matter which I will deal with later.

27. I further propose that the work of sowing should be started in the next official year (1923-24). Several months of preliminary work will be required for preparing the soil and the sowing cannot be undertaken until the rains of 1924. Preparing the soil and erecting the temporary buildings should be commenced about the 1st October 1923, and the additional establishment will be required with effect from that date.

28. The additional expenditure in 1923-24 will be as

CAPITAL EXPENDITURE.

Construction of a bungalow for the new District Forest Officer, say	Rs.	20,000
" of an office for " " "		20,000
Total.		40,000

RECURRING EXPENDITURE

Establishment as detailed in para 26 for 5 months.		16,040
Temporary buildings in three localities at Rs.3,000 in each (Vide para 24).		9,000
Preparation of the soil over 3,000 acres at Rs.2-8-0 per acre.		7,500
	Total	72,540
or say.	Rs.	72,500
Deduct expenditure now being incurred on sowing.		9,000
Balance.	Rs.	63,500

29. In order to cover the annually recurring additional expenditure detailed in para 26 (i.e. Rs.52,500) I propose as already stated in para 25 to expand the timber extraction ~~annual~~ now in progress and to obtain an additional annual revenue in this way of Rs.60,000. In order to do this it will not be necessary to increase the establishment except to form the addi- range alluded to in para 22 and the only additional tional expenditure will be such as is required for felling and extracting the timber. There is considerable difficulty in disposing of any large quantity of timber in South Kanara, and I propose that logs of the better classes should be railed or shipped Baliapatam where prices are likely to be considerably more favourable than in the district itself. It should I think be possible to obtain an all round profit on the timber taken to Baliapatam of eight annas per cubic foot as compared with only about four annas if the timber is sold in Kanara. If half the output is sent Baliapatam and the other half sold locally the average profit sh thus be six annas per cubic foot and in order to obtain an additi al revenue of Rs.60,000 per annum it will be necessary to fell ar extract 1,60,000 c.ft. in addition to the 60,000 c.ft. annually felled at present or about 2,20,000 c.ft. in all. The average cost of felling and transport to Baliapatam will be about 14 per cubic foot and of felling and transport to the coast i

10 annas. If half the quantity is taken to Baliapatam the total annual expenditure on the additional quantity of 1,60,000 c.ft. will be Rs.1,20,000. As local transport is limited it will be necessary to supplement it by the purchase of 75 carts and pairs of buffaloes for which capital expenditure amounting to Rs.32,000 will be required.

30. It should be possible to work up to the whole of the proposed output in the financial year 1923-24 when the total additional expenditure will thus be:--

Felling and transport of timber as above.		Rs.1,20,000
Purchase of carts and buffaloes.		" 32,000
Expenditure as detailed in para 28		" 63,500
	Total.	Rs.2,15,000

Of this Rs.40,000 for buildings and Rs.32,000 for carts and buffaloes or a total of Rs.72,000 will be capital expenditure, leaving a balance of Rs.1,43,000 as recurring expenditure. This will be more than recouped by the sale of the additional quantity of timber during the year or very shortly after its close. I will deal with the proposed expenditure and revenue in more detail in the schedule to be submitted with the budget for the year 1923-24.

31. I enclose a touring map of South Kanara showing the proposed redistribution of the divisions, and send by separate registered post a large scale map showing the various classes of forest dealt with in para 8, and the localities where I propose to carry out the following operations.

Copy of letter from the Ag. Chief Conservator of Forests.ref.No. 2053/22-3, dated 22nd August 1922.

Subject:-- Budget -- 1923-24.

I submit herewith details of new schemes to be included in Part II of the budget for 1923-24. The schemes are the following:-

I. Formation of a Forest Engineering and Utilisation Branch of the Forest Department, the net cost of which is estimated Rs.22x22 70,500.

II. Building, water-supply and improvement of a District Board road at Mount Stuart in the South Coimbatore Division, the estimated cost of which is Rs.20,000.

III. Purchase of American timber wagons for the Chanar Weir exploitation scheme in Palghat Division, the estimated cost of which is Rs.18,000.

IV. Additional establishment in the Wynaad Division and construction of buildings to house it at an estimated cost of Rs.36,776.

V. Extensive regeneration (sowing)operations in the South Kanara District (North and South Kanara [illegible] including additional establishment and buildings; and to pay for the work and establishment on expansion in the extraction of timber.total estimated cost Rs.2,61,000.

The total expenditure proposed for new schemes is thus Rs.4,33,325.

2. Before handing over charge to Mr. C.Cox who was uncertain as to what was to be considered a "new scheme" started in collaboration with myself the final portion of his report on the formation of the proposed new Forest Engineering Branch, and in it dealt with all major forest operations to be carried out in 1923-24, according to the report schedules prepared by the Conservators dealing with each of the operations. We intended these schedules to be placed before Government before the end of the current month as "new schemes" to be subsequently included in Part II of the budget. We have since, however, discussed the matter with Mr. Cox and I do not consider the "new schemes" [illegible]

the orders of Government in G.O. No.952 of 1st August 1923 do not appear to fall into Part I of the budget.

3. To the schedules dealing with new schemes II to V I have appended detailed notes. In the case of scheme I, I have not done so, as Mr.Cox has written at length on the subject and his report will reach Government very shortly; it may, I suggest be referred to for any explanation required. I further venture to invite a reference to the same report for information regard. the major operations of which the new schemes now dealt with ~~from~~ form a part.

4. As regards the Agency, for which a scheme has been sanctioned by the Secretary of State, vide Government Order No.603 Development Department, dated the1st May 1922, at a recent Conference at Kaltair attended by the Agency Commissioner, Mr.Cox and the Conservator of Forests, First Circle, it was decided that the original proposals should be modified and that as a commencement the number of Agency Forest Divisions should be 2 instead of 3. I have received from the Conservator, First Circle, a copy of a report which he has submitted through the Agency Commissioner embodying the proposals decided at the meeting referred to. If these proposals are adopted, the total cost of establishment etc. will be Rs.99,500/--.

Dev. Dep

O. M. No. 1737/22-3 dated 8-9-22.

* * *

6. Scheme V. Extensive regenerati operations in the South Kanara Dist cluding additional establishment ar buildings.

The Govt. consider that the ambitious proposals for the exploitatio of South Kanara forests must lie over until the exploitation branch can tackl it. The C.C. may, if necessary, apply for funds for commencing regenera tion. It is presumed that this will not necessitate a large establishment or the creation of a new Forest division. Provision for any expenditure required for this purpose should come in Part I of the budget as forming part of ordinar forest operations.

H. G. S.

8-9-22

Dev Dept

South Kanara Forests - Development

1655 I/22 From the C.C.F. D/4 298/20-3 3/10.8.22

To Messrs Lees.

Please see the CC's letter and the enclosure thereto in the C.F. on the question of the development of South Kanara forests. The C.C. suggests that orders on these proposals may be held over until his further report ~~is received~~ subd to Govt which will be about the end of this month ~~In view of the~~ financial conditions it is for consideration whether the scheme will be ~~sanctioned~~. The further report may be awaited.

KRR
19-8-22
SAR
24-8-22

This proposal is to be included in the schemes for execution next year and it will appear in the list called for ~~by us~~ to be submitted before the end of this month.

S/ MWR
22.8.22

To M.S

The view of the Accounts Dept

Secy. in the linked file it is for orders whether this file may also be ~~closed in a Co.~~ recorded and stitched with the papers in the linked file.

KRA
22-9-22

LRR
23.9.22

This relates to the extensive Re-generation ~~of~~ operations in South Kanara Dt. The C.C. has already been told that these proposals should be ~~be~~ pending their scrutiny by the Special staff proposed for Exploitation purposes.

These papers may clubbed with those in the linked file & recorded

S/. KWR
24-9-22.

VS

To K-S

Please see draft put

for approval

KWR
26/9/22

KRA
25-9-22

LRR
25-9-22

Scheme V. Extensive Regeneration operations in the South Kanara District.

The total estimated cost of the scheme is Rs.2,81,550 against an expected revenue of Rs.247500 showing a deficit of Rs.34,050.

The details of the scheme will be found in the C.C's report in the linked file. So far as financial calculations are concerned, the conservator's report found on pp.33 and 34 of the Report supercedes the previous report.

The details of expenditure are given below:-

(1) Felling and transport	Rs.	1,63,750
(2) Purchase of buffaloes &c.		18,000
(3) Purchase of carts etc.		15,000
(4) Construction of buildings		56,600
(5) Preparation of soil for regeneration purposes.		7,500
Total		2,60,850
(6) Establishment		20,700
Total		2,81,550

The scheme has been in operation from several years past, the output being 60,000 c.ft. of timber with a net revenue of Rs.20,000 per annum. It is now proposed to increase the output by increasing the staff and expanding the operations.

Whether all the items referred to supra should go into Part II, I am not quite sure of. Following the analogy of similar schemes, hitherto dealt with the expansions of the previously existing operation need not find place in Part II, unless radical changes are introduced, e.g. the substitution of motor tractors for bullocks and buffaloes. In the present case, no such proposals form part of the scheme. The increased provision under the various items may as well appear in Part I with explanatory notes against each item having an increase

No. The ordinary departmental operations not this scheme.
H.G.S.
5-9-22.

Again, the Conservator's report found in the linked file, as well as the report found on pp.31-34 of the printed report propose an additional establishment of one more Imperial office for South Kanara Dt., three more Rangers, six foresters and 24 guards, three Range peons, the usual establishment of a District Forest Officer, the usual travelling allowances etc. The cost of this was worked out to be Rs.45,200; but it has been suggested to entertain the establishment from 1st October. So provision for 5 months only appears in the figure entered against item No.6 on the previous page.

Item No.4 "construction of buildings" includes the cost of constructing a bungalow for the new District Forest Officer at Rs.20,000 an office for him for Rs.20,000, quarters for a Ranger Rs.5,000 and an office for him at Rs.2,600

At this stage, I beg to raise the question wnether the additional establishment, and the construction of buildings for it, though necessitated directly on account of the expanded operations on this scheme, should have the cost debited to it; in fact, the whole of the South Kanara Dt. which is now in charge of two D.F.Ss' is proposed to be split up into 3 charges; and the operations on this scheme are not to be confined only to the newly created charge (v.paras.19-21 on pp.14 & 15 of C.F. in the current file). This general increase in establishment may be taken up separately and if and when the commercial system of account keeping is introduced the portion of over-head and establishment charges, which may be considered as appertaining to this scheme may be debited to it.

Further on account of this heavy capital expenditure n buildings for the establishment which comes to nearly 000 Rs. the scheme has to be shown as resulting in f Rs.34,000 and even next year, the surplus

revenue of Rs.20,000 per annum in previous

My suggestion therefore is to separate -vision for additional establishment and the buildings and make an application for it, addition of an Imperial office to the cadr the sanction of the Secy. of State; but Mr.T in his note on p.26 of c.f. suggests that th Dt.Forest Officer meant for Kurnool Dt. may b transferred to this Dt. it appears that the 4t Division for Kurnool Dt. has already got all the needed sanctions and the post is one on the sanc tioned strength of the Department. The transfer this Division from Kurnool to South Kanara Kurnool Dt. may be sanctioned by Government. This provision the additional establishment only needs to go to Part II the other items of expenditure are but ol ones, only on an extended scale, they must go to Pa Part I.

My revised figure under this scheme will be Rs. 68,300 as shown below:-

Establishment for 5 months		Rs.20,700
Construction of buildings		47,600
	Total	68,300

against Rs.2,81,500 applied for by C.C.

S.

K.N.R.
3-9-22.

I consider that these ambitious proposals for replanting the forests of S.Kanara should lie over until the exploitation staff of the department is properly organised and until the real cost of extraction, the existence of markets, the rates at which the timber can be placed on the market etc. are adequately gone into. It may be the case that these forests are urgently in need of regeneration but as the Forest Dept. has been content to leave

lone for the last half a century I think the
of starting regeneration may without harm
for another year or two.

The scheme was put up by Mr.Tireman in a report
x on the 8th of July 1922 which was sent on to
h Mr.Cox's covering letter of 10th August 1922.
ns that the earliest report made in Feby. 1920 cf. p.4. supra -
ing these forests gave the impression that there
little to be done with them except to regenerate
d that exploitation would have to be more or less a second-
consideration; it would appear from para.4 of
.Tireman's letter of the 8th July 1922 that this im-
ression had been conveyed by the D.F.Os. on the spot
s regards the northern division. The result of Mr.
Tireman's inspection, however, cast a somewhat lurid light
on the efficiency of these forest officers, because,
upon visiting the northern division, Mr.Tireman found
in his own words "that far from there being no large area
of exploitable timber the ghat forests are some of the
finest I have ever seen and I have little hesitation in
saying that when its proximity to sea is considered
this division is one of the most, if not the most, valua-
ble forest dvns. in the Presidency". The report in
question by Mr. Tireman goes on to give a most glowing
account of the possibilities of exploitation, but I con-
fess that many of the particulars given regarding the
prices which could be obtained and the financial aspect
are pretty clearly based on mere conjecture. In para.12
of his letter Mr.Tireman admitted that, before a deci-
sion were taken as to whether a scheme of this magnitude
should be embarked upon, a careful examination of the
whole project by an expert in lumbering was absolutely
essential and in this opinion Mr. Cox fully concurred.

3. In the second part of his report Mr.Tireman dealt
with the question of regenerating these forests and after
discussing at considerable length proposals which

involving the creation of a new forest division, the appointment of an additional Imperial Forest Service officer with rangers, foresters etc. to correspond as also the building of a bungalow and office to the District Forest Officer he finishes up his letter by proposing to actually start operations on only half the scale. In fact his letter is so confused that I find it almost difficult to discover what it is intended to commit Government to.

4. The final report of Mr. Tireman on these proposals is contained in schedule VII of Mr. Cox's report dated 10th August 1922. The cost of the scheme as given in schedule VII is almost impossible to extract from the confused way in which it is presented. In the budget proposals for 1923-24 he contemplates expenditure as follows:-

	For full year Rs.	For 1923-24 Rs.
(1) Establishment	45,200	20,700
(2) Buildings	3,000	56,600
(3) Purchase of carts	---	15,000
(4) Purchase of bulls		18,000
(5) Felling and extraction	---	1,63,750
(6) Sowing & preparation of soil	18,000	7,500
Total	66,200	2,81,550

5. On the revenue side he expects to sell 1,10,000 c.ft. of timber at Baliapatam in Malabar and elsewhere in S.Kanara and to realise Rs.2,47,500. Mr. Cox's comments on these proposals will be found at pages 14 and 15 of his printed letter dated 10th August 1922. So far as the budget proposals of 1923-24 are concerned Mr. Cox observes that the question to be settled is whether Govt. are willing to spend Rs.2,81,550 in addition to the cost of the existing district forest staff and of works other than timber operations

with the somewhat uncertain prospect of recovering a revenue of Rs.2.47.500 from the sale of timber. Personally, I am strongly of opinion that they should not. The whole justification, it seems to me, for this expenditure should rest upon a proper, businesslike investigation of the possibilities of the forest, of the stamp of timber which it contains, of the cost of extracting that timber and of the markets that we are likely to find for it. These points appear to be dealt with, so far as they are dealt with at all, in paras. 3 and 4 of Mr. Tireman's printed report at page 32 of the annexure to Mr.Cox's report of 10th August just referred to, and I think it is pretty clear that the whole thing is the merest guess work. I am strongly of opinion that we should not launch out on large schemes of this kind until we have got our exploitation staff running and are in a position to approach the matter in a businesslike way. It is probably true that the S.Kanara forests are well worth exploiting but I am strongly of opinion that we should not rush into them as we rushed into the Chenat Nair without knowing what we are about

6. I would therefore tell Mr. Tireman that the whole of this S.Kanara expansion scheme must lie over and that he must provide in his budget merely for the ordinary operations as hitherto carried on in that district. As for his proposals for regeneration I see no reason why they cannot lie over for a year or two until the matter can be properly investigated.

H.G.S.
5-9-22.

C.C. to be told that the ambitious proposals for exploitation must lie over until the exploitation branch can tackle it. He may if necessary apply for funds for commencing regeneration. It is presumed that this will not necessitate a large establishment or the creation of a ~~mere~~ new forest district. This is an ordinary

forest operation which would come into Part I.

H.G.S.
6-9-22.

To Rs.

No action appears to be necessary in view of Secy's remarks above.

LRR
19-9-22

The notes may be recorded for future reference

S/KMP
15-9-22

Encls no 9

Recorded

KMP
22/9/22

KRR
19-9-22

LRR
19-9-22

Forests — South Kanara Dt —

Regeneration — Budget provision —

Scott. II-1o (a)—48,962—2-2-22. (6)

DEPARTMENT

	Date.	Initials.
When received for Fair-copying.	Read	27/9/22
When copied	27-9-22	G.V.K.
When examined	27	
When signed		
When despatched	27/9/22	

Forest — South Kanara St —
Development — Proposals —
Budget provision

READ AGAIN G.O. No. ....., dated ..... 192 .

" " " " ....., " ..... 192 .

READ ALSO;—

C. No. 1655 I, From the CCF Rge., No 298/20, dated 10. 8. 1922

" " ..... " " ..... " ....., " ..... 192 .

" " ..... " " ..... " ....., " ..... 192 .

ORDER.

No 1292, dated 27. 9. 1922

Recorded with
reference to Para 6 of
G.O. No 1737 I/22-3
dt 8-9-22.
KMR
26.9.22

Kna
25.9.22
CRR
25-9-22

DESPATCHED
27 SEP 1922

To the CCF
(with a South Kanara Sh
Touring map returned)